AT the "STATIC" SHOW

Components, Accessories and Materials to be Exhibited by Nearly a Hundred Firms : A Useful Guide.

IN the pages that follow, the productions of the hundred-odd firms exhibiting in the "static" section of the S.B.A.C. Display at Hatfield on Monday and Tuesday have been grouped in appropriate sections for easy reference. It will be found that firms are alphabetically arranged within each section, and that where one concern's products fall within two or more sections to any notable degree, a cross-reference to the principal section is given.

Engines are reviewed separately, on pages 642-645.

Aircraft Constructors' "Indoor" Exhibits

AIRSPEED (Stand C).—Detailed models of the Envoy will be shown, one with cut-away fuselage side, another of a special machine recently delivered, and a third of the convertible Envoy, with its equipment removable to show how the aircraft can be rapidly converted from its civil to its military form. In addition there will be a working model of the Airspeed retractable undercarriage and suitable literature.

Makers: Airspeed, Ltd., The Airport, Portsmouth.

ARMSTRONG WHITWORTH (Stand F).—This exhibit will consist of parts of the A.W.27 or Ensign class heavy transport landplane, a quantity of which are now in production for Imperial Airways. The parts include a main plane rib with a section of the box spar. Owing to limited space the rib shown will be one positioned on the aircraft midway between the fuselage and the wing tip. There will also be a tail plane rib with a section of the box spar. This is of similar construction to the other rib. Models and photographs will complete the exhibit.

Makers: Sir W. G. Armstrong Whitworth Aircraft, Ltd., Whitley, Coventry.

BLACKBURN (Stand M).—Both Blackburn and Cirrus exhibits will be shown on one stand. The aircraft exhibit will consist of the front portion of a Shark seaplane float, showing the frames, stringers and plating, all of which are of Alclad material, riveted with Duralumin rivets. This exhibit will be only partly plated, and will be mounted on a turntable stand, so that inspection of the interior is facilitated. The Shark floats are specifically designed for rough-water conditions and have gained an excellent reputation for sturdiness and good performance. Shark seaplanes have been supplied not only to the R.A.F., but also to the Portuguese and Canadian Governments. The Cirrus exhibits will consist of one Cirrus Major of 138-150 h.p., and one Cirrus Minor of 75-85 h.p. Both engines of the air-cooled four-in-line type, and lightness and simplicity are outstanding. In addition to these exhibits there will be small miscellaneous exhibits consisting of a model of the new dive bomber and a model of the Shark together with miscellaneous photographs of Blackburn aircraft, and of aeroplanes fitted with Cirrus engines.

Makers: Blackburn Aircraft, Ltd., Brough, E. Yorks.

HANDLEY PAGE (Stand A).—The five exhibits here will be as follows: (1) Model of the H.P.52 ("Hampden") twin-engined long-range medium bomber. (2) Demonstration model of the Handley Page slot, showing the automatic action of the slot at various angles of incidence of the wing. (3) Demonstration model of the latest Handley Page patented rear slotted flap mechanism. This mechanism is entirely contained within the wing and thus causes no drag-producing excrescences. In this particular instance the model flap is operated by a hydraulically worked system designed by Lockheeds, which system is in every way similar to that used on the Handley Page Harrow heavy bombers. (4) Handley Page patented electrical bomb release gear demonstration set showing model of selection firing and fusing the bombs. (5) An Alclad tank constructed by the De Bergue riveting system, for which Handley Page are the inventor's sole foreign agents.

Makers: Handley Page, Ltd., Cricklewood, London, N.W.2.

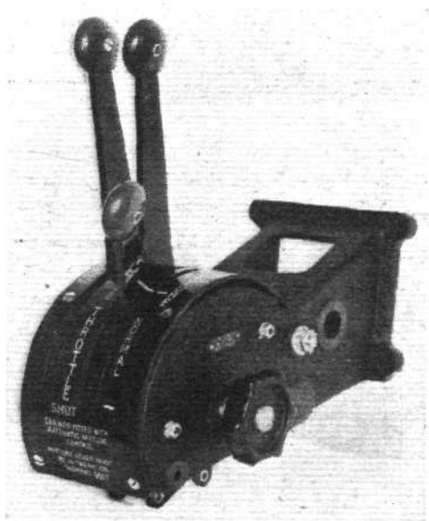
Engine Components

AMAL (Stand 65).—Flame traps and fuel pumps are two interesting exhibits to be shown by this firm. The flame trap, of course, is a safety device for fitting into the main air intakes of carburettors or in a tank filler neck. Fuel pumps, mechanically driven from the engine, will be shown in single and duplex models. Other items of interest on this stand will be the flush-fitting, self-fixing cowl fasteners and fuel pressure regulators designed to regulate the fuel supply to the carburettor at a predetermined figure irrespective of the delivery pressure from the feed pump or tank, where such pressure is within the range of 4-10 lb. per sq. in. Finally, there will be control rods with ball and roller joints, flowmeters, jet calibrating machines, oil thermometer pockets, petrol filters and Bunsen burners.

Makers: Amal, Ltd., Holford Works, Perry Barr, Birmingham, 20.

BRICO (Stand 4).—The exhibits on this stand will comprise a full range of Brico piston rings and scraper rings for aircraft purposes. Besides rings manufactured from 4K6 material there will also be those made from Brilybdenum, which is a special high-duty piston ring material designed to stand up to excessive heat. Brilybdenum has a high elasticity value and tensile strength. It also resists the scoring tendency which is frequently experienced in high temperature engines with steel cylinders. Other exhibits will include sodium-filled valves, special alloy pistons and samples of high duty alloys for special purposes.

Makers: The British Piston Ring Co., Ltd., Holbrook Lane, Coventry, England.



Hobson master throttle control for twin engines, with single two-position mixture control.

B.T.H. (Stand 44).—The magneto exhibits will comprise a selection from the full range, including examples of the rotating armature, polar inductor and rotating magnet types. There will also be exhibited engine starters, hand starter magnetos, lightweight air compressors and electric tachometer equipment. A display of Mazda lamps will occupy a position of prominence on the stand. This display will include 12-volt lamps in sizes ranging from 12 to 26 watts for the lighting of cabins, instrument boards, and for other interior uses in aeroplanes. Low voltage, high wattage lamps, developed for use as landing lights, will also be shown, with projector lamps. The line filament lamps are particularly suitable for certain types of equipment. There also will be seen Mercra (electric discharge) lamps which are particularly suitable for the economical lighting of large interiors.

Makers: The British Thomson-Houston Co., Ltd., Crown House, Aldwych, London, W.C.2.

BURGESS.—*See "Miscellaneous."*

CALLENDER'S CABLE (Stand 33).—This company will exhibit a special arrangement of samples of all types of electric cables and flexibles for aircraft installation and for use on aero engines. The cable finishes shown will include armouring, moisture-resisting and all other types manufactured. Aircraft photographs of all modern types wired with cables of the firm's manufacture will be shown, together with a model of an Imperial Airways' machine, in the original of which these cables have been installed.

Makers: Callender's Cable and Construction Co., Ltd., Hamilton House, Victoria Embankment, London, E.C.4.

ENGLISH STEEL CORPORATION.—*See under Metals.*

HOBSON (Stand 2).—A range of aircraft carburettors of various types and sizes will be exhibited by this firm, with automatic mixture, boost and cockpit controls, electrical ice-warning and alcohol de-icing units, a compressed-air operated fuel pump and depression gauge. The principal exhibit will be a working model of the Hobson master control scheme. This consists of a Claudel-Hobson carburettor in which is incorporated a three-stage boost control, automatic mixture control and the necessary linkage, the whole being coupled up to a cockpit control. This arrangement is such that, due partly to the construction of the carburettor and also to the interlocking of the levers, it is impossible for the pilot to give an incorrect mixture strength under any conditions. It is also impossible for him to stall his engine by using a weak mixture when landing. An entirely new exhibit will be an engine-driven hydraulic pump for undercarriage operation, etc.

Makers: H. M. Hobson (Aircraft and Motor) Components, Ltd., 47-55, The Vale, Acton, London, W.3.

K.L.G. (Stand 87).—The centre piece of the K.L.G. display will consist of a greatly enlarged model of the mouth of one of the platinum-pointed types which are now in full production, while various examples of chromium-plated and sectioned plugs of the normal type will flank this model. Another development which is being publicly shown for the first time is the integrally screened plug (to prevent radio interference) for use with an ignition harness. Detachable screens will also be shown, together with a representative range of plugs, including the K.L.G. Wizard, which are available with the standard screw-ended thread, ball-ended terminals and other fittings designed to meet particular requirements. It will be possible to examine all the exhibits very closely as the mounting rails are rotated.

Makers: K.L.G. Sparking Plugs, Ltd., Putney Vale, London, S.W.15.

LIGHT PRODUCTION CO. (Stand 16).—The exhibits on this stand will consist of